



EARTHQUAKE – 2023

Burcu Ekim

What is an earthquake?

- An earthquake or earthquake is the event of seismic fluctuations that occur as a result of unexpected energy in the earth's crust and the shaking of the earth by these waves.



BEFORE AN EARTHQUAKE

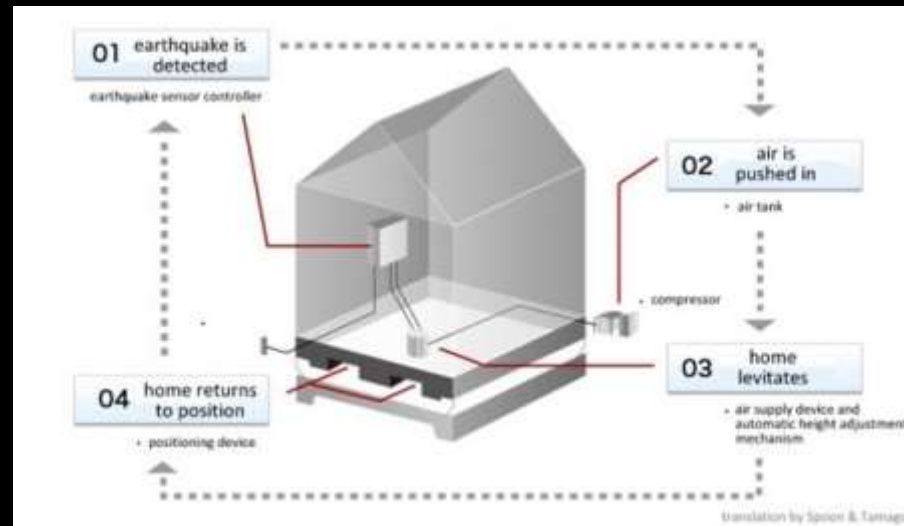
- Prepare your home:
 - Store breakable items in low, closed cabinets, and fasten shelves securely to walls.
 - Hang heavy items, such as pictures and mirrors, away from beds and couches.
 - Secure and brace overhead light fixtures.
 - Repair any deep cracks in walls, ceilings and foundations.
 - Store pesticides and flammable products in closed cabinets and on bottom shelves.
 - Repair defective electrical wiring, water or gas connections.
- Identify safe places in each room of the house:
 - Under sturdy furniture, such as a heavy table or desk.
 - Against an inside wall or under a door frame.
 - Away from glass or where heavy furniture could fall over.
- Locate safe places outdoors:
 - In the open, away from buildings, retaining walls, trees, overpasses, and power or telephone lines.

DURING AN EARTHQUAKE

- 1. If inside:
 - Drop down onto your hands and knees.
 - Take cover in a safe place and hold on.
 - If you are in bed, stay there and cover your head and neck with a pillow.
 - If you are in the kitchen, quickly try to turn off the stove, if possible.
 - Stay away from pictures, windows, light fixtures or anything that could fall and break.
- 2. If outdoors:
 - Move into the open, away from buildings, street lights, poles and utility wires.
 - Get down low and stay there until the shaking stops.
- 3. If in a moving vehicle:
 - Stop quickly, and stay in the vehicle.
 - Move to a clear area away from buildings, trees, utility wires and overpasses.
 - Once the shaking has stopped, proceed with caution, avoiding bridges or ramps that might have been damaged by the quake.

AIR DANSHIN'S 'FLOATING' HOMES

- Japanese company Air Danshin has created a unique solution to the problem of earthquakes: levitation! The residential homes are fitted out with a quake detector. If it registers a tremor, a compressor pushes air into a space beneath the building, lifting it one to three centimetres from the building's foundation. This makes it impossible for the building to shake and therefore helps avoid damage.





PROJECT EXAMPLES

- We can do something like floating houses in Turkey.
- And we can build a steel room with ventilation inside the house. It should contain food and supplies. And there should be an alarm system outside. It should play for a few days. It can charge by itself.



SOURCE

- <https://www.planradar.com/gb/japan-earthquake-proof-buildings/>
- <https://www.japan.go.jp/regions/resilientjapan/earthquake.html>